

MASTER PLAN SUPPLEMENT NO.2  
TO GRAPEVINE LAKE MASTER PLAN  
DESIGN MEMORANDUM NO. 1C (REVISED)

U.S. ARMY CORPS OF ENGINEERS  
FORT WORTH DISTRICT  
FORT WORTH, TEXAS

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## Chapter 1 - INTRODUCTION

### 1-01. Background

The most recent version of the Grapevine Lake Master Plan was published in September 1971. Two supplements have since been approved in 1994 and 2000 to add 94.1 acres of Oak Grove Park, and 178 acres of Silver Lake Park, to existing Park & Recreation leases held by the City of Grapevine. These supplements authorized construction of trails in Oak Grove Park and construction of the Opryland Golf Course and related facilities in Silver Lake Park. The Environmental Assessments (EA) prepared for the Opryland Hotel facilities and golf course specified that all lands not classified for high density recreation, or operation and maintenance purposes, and all past, present, and future mitigation sites shall be reclassified using current land classification standards set forth in EP 1130-2-550. The EA also specified that the Corps of Engineers would designate utility corridors on Federal land to reduce future environmental impacts from new utility proposals. The required reclassification of lands and utility corridor designations are incorporated into the scope of this supplement. Also included in this supplement are additional land reclassifications and new resource use objectives as explained in the following paragraphs.

### 1-02. Purpose and Objectives

In addition to complying with the findings of the Opryland Golf Course EA's the Corps has determined a need to further supplement the master plan to accomplish the following objectives:

a. Identify Environmentally Sensitive Areas on all lands classified as recreation lands in the 1971 Master Plan. Environmentally Sensitive Areas are defined in EP 1130-2-550 and include areas of ecological, scientific, aesthetic, and cultural value. The 1971 Master Plan was written to comply with the land classification standards in effect at that time. These earlier standards placed little emphasis on the identification and protection of features having ecological, scientific, cultural or aesthetic value. Since 1971, the Corps of Engineers environmental stewardship mission has been clearly defined in EP 1130-2-540, and the land classification standards have changed to reflect this mission. Furthermore,

the Federal land surrounding Grapevine Lake has been in Federal ownership for approximately 50 years. During this 50-year period, the vegetation on these lands has changed dramatically, with many areas succeeding naturally toward a climax vegetation status with resulting high ecological and aesthetic value. Considering the fundamental shift in the Corps of Engineers mission toward greater environmental stewardship, and the increased ecological value of the Federal land at Grapevine Lake, there exists a great need to identify and protect Environmentally Sensitive Areas.

b. Prepare new resource use objectives for Grapevine Lake by updating Chapters five and seven of the current master plan. New resource objectives are needed to place greater emphasis on the Corps of Engineers environmental stewardship mission.

c. Examine the current recreation classification of Roanoke, Rocky Point, Knob Hills, and North Shore Parks for possible reclassification. These four parks, consisting of 475 acres, are currently undeveloped, but three of the four are traversed by the North Shore Trail which is listed by the Department of Interior as a National Trail. These parks have relatively rugged topography and support excellent examples of mature, native woodlands and grasslands typical of the Eastern Cross Timbers and Prairies Vegetational area of Texas.

#### 1-03. Study Process

Grapevine Lake is geographically located in a rapidly developing area within the Dallas-Fort Worth metropolitan area. The dam is located less than one mile from the northern end of the Dallas-Fort Worth International Airport and project lands are almost totally included in the jurisdictional areas of six municipalities. There are three major marina concessions on the lake and numerous interest groups which contribute time and talent to the management of the lakes recreational and natural resources.

Before embarking on the effort to supplement the lake's master plan, a meeting was held on April 11, 2000 with a broad cross-section of stakeholders. The meeting was attended by representatives of eight municipalities, federal and state elected representatives, state and federal resource agencies, the marina concessionaire, and several trails and equestrian interest groups. The purpose and need for the

master plan supplement was discussed and a collaborative planning team with approximately 20 non-federal members was established (see Appendix A for team members). October 1, 2000 was set as the completion date for the final draft master plan supplement. Ultimately, this date was extended to January 2001.

1-04.        Application of Public Laws

Numerous Federal laws apply to the management of Federal lands administered by the U.S. Army Corps of Engineers. The majority of these laws are listed in a Corps of Engineers publication, EP 1130-2-540, Environmental Stewardship Operations and Maintenance Guidance and Procedures, and in EP 1130-2-550, Recreation Operations and Maintenance Guidance and Procedures. These publications are available for review at any Corps of Engineers lake office or on the internet at the Corps of Engineers national website, <http://www.usace.army.mil/>.

## CHAPTER 2 - RESOURCE OBJECTIVES

### 2-01. Introduction

In accordance with EP 1130-2-550 the following paragraphs set forth resource objectives identified for Grapevine Lake. These objectives are intended to replace Chapters V and VII of the 1971 Master Plan, Design Memorandum No. 1C (Revised) for Grapevine Lake. Resource objectives are defined as objectives to guide future design, development and management of the resource base, natural and man-made, to obtain the greatest possible benefit through meeting the needs of the public and protecting and enhancing environmental quality. The primary focus of these resource objectives is to insure incorporation of the Corps of Engineers environmental stewardship mission in the future management and development of Grapevine Lake. The objectives are grouped under the headings of general, natural resources, and recreation.

### 2-02. General Objectives

a. Coordinate Planning with Responsible Federal, State, Local, and Citizen Interests. Emphasis should be placed on establishing collaborative and administrative procedures with outside interests to assure the effective and orderly development, protection, and management of recreational, cultural, scenic, and natural resources of Grapevine Lake.

b. Minimize the Number of Easements Granted On or Through Project Lands. Easement requests for utilities, roads, pipelines, etc. should be closely evaluated and granted only when there is no practical alternative to the routing across Federal land. When no practical alternative exists, easements should be located where they have the least environmental and visual impact. In all cases, consideration should be given to routing proposed easements adjacent to and parallel with, existing easements. Appropriate mitigation for damage or loss of natural resources should be negotiated prior to granting any easement. Areas classified as Environmentally Sensitive Areas should be avoided as well as key facility locations within areas classified for recreation development.

c. Administer Project Lands to Avoid Exclusive Use of Federal Lands and Facilities. Future leasing of project lands for any activity that is not available for general public use will not be allowed.

d. Improve Control of Project Lands Through Boundary Delineation Using Various Fencing Techniques. To prevent encroachments, off-road vehicle traffic, trash dumping and similar problems, the project boundary should be delineated with a type of fence that is compatible with adjacent private land. Where allowed by the Shoreline Management Plan, gates or openings in the fence should be permitted to accommodate pedestrian traffic.

## 2-03. Natural Resources Objectives

a. Protection of Environmentally Sensitive Areas (ESA). All project lands shall be examined for areas having scientific, ecological, cultural, or aesthetic features of high value. Such areas shall be identified and protected as ESA's. Examples of such areas would include areas dominated by climax or near-climax vegetation, areas where vegetation has been planted as mitigation for loss of natural resources, cultural sites eligible for or listed on the National Register of Historic Places, riparian areas, wetlands and other high-value aquatic sites, areas where natural vegetation or topography serves as important visual and noise buffers, and areas having exceptional aesthetic qualities such as large expanses of wildflowers. Limited or no development of public use is contemplated on land designated as an ESA, even if the ESA is located in a designated recreation area.

b. Seek Opportunities for Environmental Education, Research and Restoration on Project Lands. Through partnerships with other governmental entities and private organizations, or through direct action by the Corps of Engineers, project lands should be used for environmental education and research. Project lands degraded by past land use should be restored to provide benefits for fish and wildlife or improved water quality. All project lands classified as Multiple Resource Management - Wildlife Management General, are ideally suited for meeting this resource objective.



c. Stewardship of Wildlife Habitat. Through consultation with State and Federal wildlife agencies, animal and plant species of high, regional importance shall be identified, and habitat for those species shall be developed or improved. In accordance with EP 1130-2-540, "special status species and/or their critical habitat", which includes species listed as endangered, threatened, candidate, or sensitive by the U.S. Fish & Wildlife Service or by the state of Texas, shall be given priority in management decisions.

d. Management of Woodlands and Grasslands. In the absence of special habitat needs, as described in the above paragraph, woodlands and grasslands located on lands classified as wildlife management, low-density recreation, and environmentally sensitive areas at Grapevine Lake shall be managed to eventually reach a climax stage of vegetation typical of the Cross Timbers and Prairies ecological region of Texas. A possible exception would be areas where maintenance of expansive stands of wildflowers is considered a desirable management goal, thereby requiring maintenance of the vegetation in a sub-climax status. Woodlands and grasslands in intensive recreation areas should also be managed to achieve climax status to the extent possible while continuing to meet recreational needs.

e. Management of Aquatic Habitats. Aquatic habitats shall be improved and restored through a variety of techniques such as strategic placement of brush shelters and other fish attractors, construction of spawning beds, and establishment of native aquatic vegetation. Lake conditions shall be monitored for the presence of harmful aquatic weeds such as Hydrilla. When aquatic weeds are discovered control efforts should be initiated.

f. Maintain Public Hunting. For many years, public hunting opportunities have been available at Grapevine Lake in Wildlife Management Areas and some Aesthetic Areas. Waterfowl hunting has been the primary activity. With a limited area to hunt, the number of hunters is controlled through a permit system to increase hunter safety and enjoyment. Hunting opportunities should continue to be provided and managed through a permit system. Cooperative planning with cities and wildlife agencies, and implementation of wildlife habitat improvements, should ensure that public hunting opportunities continue to be a viable recreation opportunity at Grapevine Lake.

## 2-04. Recreation Objectives

a. Consolidate Public Use Areas. Wherever possible, consolidate park facilities to create larger, more functional parks. Consolidation will minimize O&M costs for roads and utilities, and day-to-day park operations will be more efficiently and economically accomplished. Emphasize operation, maintenance, facility designs and management programs which produce a family atmosphere, return visits and increased revenue. Constantly monitor for effects of user impact in park areas and take measures to stabilize and protect the resources where necessary.

b. Separation of Uses. Eliminate conflicts between day use and overnight use by physically separating areas for these specific uses.

c. Facility Rehabilitation. Evaluate all parks and prioritize rehabilitation needs. Implement and follow through on efforts to improve the quality and functionality of recreation areas to include adding new facilities, improving park road circulation patterns, providing erosion and compaction-resistant surfaces at high-use camping and picnic sites, replacing outdated cinder block restrooms, and establishing and conforming with a lake-wide architectural theme.

d. Park and Recreation Leases. Lake and District staff should encourage lessees to implement new designs and facility rehabilitation efforts where needed. Lessees should be monitored for proper operation and maintenance of facilities as required.

e. Safety Programs. Visitor safety, on land and water, should be continuously emphasized and programmed at all times. Proper safety information signage, buoys, hazard identification, safe facility design and education programs are a must. With current boating traffic perceived to be approaching an unsafe level at peak times, lake and District staff should, in the absence of a lake use study which might indicate otherwise, discourage any action which would serve to increase boating use.

f. Recreational Trends. Lake and District staff should stay informed and be sensitive to new trends in outdoor recreational activities, and take the initiative to enable the development of such opportunities.

e. Universal Accessibility. All new/rehabilitated facilities should be designed and constructed for accessibility by persons with disabilities. As funds permit, existing facilities should be retrofitted for ADA compliance, placing emphasis on those facilities which are most important such as restrooms and camp/picnic sites.

f. Aesthetics. A continued effort to improve the general aesthetics of parks and other land areas should be maintained. Recommended actions include landscaping with native plant materials, improved grounds maintenance, architecturally attractive facilities, and architectural themes. Also to be considered: confine vehicular traffic to designated roads, establish vegetative screening between closely spaced sites and screen unsightly areas as needed.

g. Trails. Existing hike/bike/equestrian trails serve a significant segment of the public at Grapevine lake. Every effort should be employed to adequately maintain and, where possible, improve and expand for increased use of these recreational trails.

## 2-05. Future Trail Maintenance and Development

Although this master plan supplement is not intended to revise the recreation development design concepts set forth in the 1971 Grapevine Lake Master Plan (with the exception that design concepts in some recreation areas are no longer valid due to land classification changes set forth in this supplement), there was almost unanimous interest from the planning team in the future of trail development. The planning team recommended that the supplement contain general guidance on the type of trail development that would be appropriate for the various land classifications. The following paragraphs set forth that guidance with the understanding that each trail proposal is unique and is often constructed and maintained entirely through donations and volunteer effort. Therefore, each trail proposal requires considerable flexibility in design and choice of materials that will protect resources and serve the public.

a. Low Intensity Use Trails

In general terms, the consensus of the planning team defined low intensity use (low impact) trails as trails with a natural earth surface. Minor use of natural reinforcement materials such as gravel, wood chips, or crushed granite would be acceptable to control erosion or improve trail safety. Use of geotextiles or comparable materials, or limited use of concrete and paving blocks, may be acceptable for use in sensitive locations such as stream crossings or wetlands. With proper planning to protect areas classified as Environmentally Sensitive Areas and Wildlife Management Areas, low intensity use trails are acceptable in all land classifications. However, trailheads, which normally require a vehicle parking area, should be located only in areas classified for high intensity or low intensity recreation. Trailheads should not be located in Environmentally Sensitive Areas or Multiple Resource Management - Wildlife Management General Areas (Note: Trailheads could be located in Multiple Resource Management Areas that have both a Wildlife Management General and a Recreation - Low Density classification.)

b. High Intensity Use Trails

High intensity use trails are generally defined as trails with a hardened surface such as concrete, asphalt, soil cement, or extensive use of crushed granite or gravel. These trails are intended for high traffic situations and are generally appropriate only in areas classified for high intensity recreation development; recognizing, of course, that in a few locations existing high intensity use trails are located in Environmentally Sensitive Areas.

## CHAPTER 3 - ENVIRONMENTALLY SENSITIVE AREAS

### 3-01. Identification Process and Team

All Federal land currently classified as a public recreation area in the 1971 Grapevine Lake Master Plan was field inspected for the presence of Environmentally Sensitive Areas (ESA's) by the following team of natural resource specialists: (Note: Most of the Federal land located west of Highway 377 is currently classified for Wildlife Management and was not inspected because these lands, due to their current classification, are already protected and managed in much the same manner as an ESA. ESA's are defined in EP 1130-2-550 as follows: Areas where scientific, ecological, cultural, or aesthetic features have been identified. These areas, normally located within one of the other classification categories, must be considered by management to ensure the sensitive areas are not adversely impacted. Normally, limited or no development of public use is contemplated on land in this classification as well as land classified for Wildlife Management.)

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### 3-02. Selection Criteria

The team of natural resources specialists used professional judgement and the following criteria as a means of evaluating Federal lands for ESA's. It is important to note that any existing public uses, including existing utility easements, roads, etc. taking place or located on these areas will continue to be authorized. It is not the intent of this master plan supplement to stop existing uses within ESA's. For example, many of the ESA's have equestrian trails, bike trails, and golf cart paths within the boundaries of the area. These uses, as well as the maintenance activities

needed to maintain these uses will be allowed to continue. Of the 4,483 acres of designated recreation lands (which includes the 620 acres of operations land leased to the City of Grapevine for the Grapevine and Cowboy golf courses), a total of 1,716 acres have been designated as ESA. An additional 867 acres of land classified as Esthetic Area in the 1971 master plan was also designated as ESA.

1. Vegetation is largely comprised of mature, native vegetation in a climax or near-climax status.

2. Vegetation exhibits rich species diversity.

3. Area has high value as resting, nesting, feeding, or roosting areas for important and sensitive wildlife species, especially neotropical songbirds, shorebirds and waterfowl.

4. Area serves an important aesthetic function as a visual buffer to adjacent private development, wildflower or wildlife viewing area, or contributes significantly to general open space values of spaciousness and natural landscape appeal.

5. Area serves an important water quality function as a run-off filtering zone for streams, wetlands, and erosion sensitive shorelines.

6. Presence or high probability for presence of archeological, historical, or paleontological resources.

### 3-03. Area Descriptions

The findings of the evaluation team are listed by park area in the following paragraphs. Each area is described by an alpha-numeric designation such as S1 for Silverlake Park, MM1 for Meadowmere Park, etc. The ranking criteria which apply to each area are listed for each area as well as a note about potential future uses of the area. The areas are shown on Figures 1 through 11.

**FIGURE 2. ROCKLEDGE AND SILVER LAKE PARKS  
(includes Grapevine and Cowboy Golf Courses)**

D1.....A 20-acre mature upland forest with wetland features. A golf green and cart path has been constructed in this area, but much of the area remains intact. Possible archeological features. Ranking Criteria 1, 2, 3, 5, & 6. No additional future uses are recommended.

D2.....This 31-acre area is the historical Denton Creek channel and adjacent undisturbed streamside zone (approximate total width 200-400 feet). This area features mature bottomland hardwoods, archeological sites, and an active heron rookery, and also serves as an important streamside protection zone. Ranking criteria 1, 2, 3, 5, & 6. No additional future uses are recommended.

D3.....This 103-acre mature upland forest may be the largest tract of intact upland forest on Grapevine Lake. The area is bisected by the uncontrolled spillway channel and features an intermittent stream along the northern boundary of the tract. Unique paleontological resources have been found on this tract. Ranking criteria 1, 2, 3, 4, & 6. Future uses may include low-impact nature and hike/bike trails.

S1.....This 9-acre mature upland woodland is a linear tract which parallels the park road in the Corps-managed Silverlake Park fee camping area. A walking/nature trail goes through portions of the area and the area serves as a critical visual screen next to private property. Ranking criteria 1, 2, 3, & 4. Future use may include expansion of the existing trail.

S2.....This 9-acre mature upland woodland is a narrow shoreline tract bordering the park road in the Corps-managed day use area of Silverlake Park. It has high aesthetic and wildlife habitat value. Ranking criteria 1, 2, 3, & 4. No future uses are recommended.

S3.....This 6-acre mature upland woodland is located along an intermittent stream near the entrance to the Corps-managed Silver Lake Park campground. Disturbance to this area has been limited to construction of a sewage lift station by the City of Grapevine near the south end of the tract. The area has high wildlife habitat value and serves as a very important visual buffer between Silver Lake Park and adjacent

residential areas. Ranking criteria 1, 2, 3, & 4. No future uses are recommended.

### **FIGURE 3. OAK GROVE PARK**

OG1 & 2.....These two areas total 27-acres and follow relatively narrow tributaries, Morehead Branch (OG1) and Farris Branch (OG2) featuring high quality riparian and upland wildlife habitat. The City of Grapevine sewage treatment plant discharges a steady flow of treated effluent into Morehead Branch, adding significantly to the habitat value of the tributary. Ranking criteria 1, 2, 3, & 5. Future use may include low-impact trail development for hiking and interpretive use.

OG3 & 4.....These tracts of good quality upland hardwood habitat totaling 60-acres serve a critical function as a visual barrier along the Oak Grove Park entrance and circulatory roads, screening the park from adjacent residential areas. Ranking criteria 1, 2, 3, & 4. Future use may include hike and bike paths.

OG5.....This 157-acre tract includes an area of high quality upland hardwoods currently used by mountain bike enthusiasts, and sizeable riparian areas on the south and north side of Dove Road. Most of the area has high value as a visual screen adjacent to residential development. Ranking criteria 1, 2, 4, & 5. Continued use of the area north of Dove Road for trails and related activities is anticipated. No future uses are recommended for the area south of Dove Road.

OG6.....This 38-acre undeveloped tract of upland hardwoods with interspersed patches of native prairie is good quality wildlife habitat and serves as a visual screen adjacent to residential development. Future uses may include low-impact trails or walk-in primitive camping. Ranking criteria 1, 2, 3, and 4.

### **FIGURE 4. MEADOWMERE PARK**

MM1.....This relatively large riparian corridor totaling 83 acres along Dove Creek supports closed canopy, mature woodlands of cedar elm, pecan, post oak and associated species. The on-going drought has caused noticeable mortality among dominant trees. The east end of the corridor



has the woodlands giving way to shoreline and wetland vegetation. Ranking criteria 1, 2, 3, & 5. Future uses may include hike-and-bike trails which parallel the Meadowmere Park entrance road. Low-impact hiking trails would be suitable along the banks of Dove Creek.

MM2.....This 10-acre tract supports a mature stand of pecan and post oak which follow the course of a small tributary. Adjacent pasture is succeeding naturally toward a woodland condition. This tract is centrally located in Meadowmere Park and contributes significantly to the park's open space character. Ranking criteria 1, 2, 3, 4, & 5. Future uses should be limited to low-impact trails.

### **FIGURE 5. WALNUT GROVE PARK**

WG1.....This 76-acre tract is a shoreline and riparian tract lying between Meadowmere Park to the east and Walnut Grove Park to the west. Most of the area is heavily wooded with small riparian areas along unnamed tributaries. Being a shoreline tract, the area has significant aesthetic value as well as high value as wildlife habitat. Ranking criteria 1, 2, 3, 4, & 5. Future uses should be limited to low-impact trails.

WG2.....This 174-acre riparian corridor along Kirkwood Branch exhibits exceptional habitat diversity. The higher elevations have remnant patches of native prairie while the areas closer to Kirkwood Branch are dominated by mature cedar elm, American elm, oaks and pecans. The perennial nature of Kirkwood Branch adds significant habitat value to this tract. Ranking criteria 1, 2, 3, 4, & 5. Future use of the tract may include trail development complimentary to the existing Walnut Grove Hiking and Equestrian Trail.

WG3 & WG4.....These two tracts, 71 acres and 36 acres, respectively, are two of the finest examples of closed canopy, mature upland hardwood forests on Federal land at Grapevine Lake. The wildlife habitat value is exceptional and the location within Walnut Grove Park adds significantly to the open space value of the park. Ranking criteria 1, 2, 3, 4, 5. Future uses could include trail development complimentary to the existing Walnut Grove trails.

## **FIGURE 6. MARSHALL CREEK PARK**

MC1.....This 34-acre tract of high quality upland and riparian hardwoods follows a small tributary lying just east of T.W. King Road. The tract has high quality wildlife habitat and serves an important water quality function along the unnamed tributary. Ranking criteria 1, 2, 3, & 5. Future uses may include low-impact hiking or equestrian trails.

MC2.....This 349 acre area takes in the main riparian corridors in Marshall Creek Park as well as a diverse upland prairie site north of Trophy Club's sewage treatment plant. A large portion of the area takes in a significant shallow water area and brushy peninsula within the reservoir. This area is of significant value to waterfowl, shorebirds, and neotropical birds. During field reconnaissance in June, 2000, the calls of painted buntings and dickcissels were noted. An indigo bunting and a nesting pair of red-headed woodpeckers were also sighted in the area. Ranking criteria 1, 2, 3, 4, & 5. Future uses may include low-impact trail development and facilities, which would facilitate wildlife viewing and photography.

## **FIGURE 7. DENTON CREEK WILDLIFE MANAGEMENT AREA**

DC 1 & 2.....These two parcels, totaling approximately 350 acres, are the mitigation sites for the natural resource losses associated with construction of the Opryland Hotel golf course and related facilities and the Cowboy Golf Course. Future use of these parcels would be limited to low intensity trail development.

## **FIGURE 8. KNOB HILLS PARK**

KH1 & 2.....These two tracts, totaling 115 acres, support the largest and finest examples of undisturbed native prairie on Federal land at Grapevine Lake. There are also important cedar elm-hackberry-pecan woodlands where the prairie begins to give way to woody vegetation at lower elevations. Ranking criteria 1, 2, 3, 4, & 5. Future uses may include additional equestrian, hike, and bike trail development compatible with the existing trail. Management favoring continued improvement of the prairie should be a priority.

KH3.....This 62-acre tract is a relatively narrow but heavily wooded riparian area leading into Knob Hills Park. This area serves an important water quality function and has high wildlife habitat value. Ranking Criteria 1, 2, 3, 4, & 5. Low impact hike and bike trails could be developed in these areas.

## **FIGURE 9. ROCKY POINT PARK AND POINT NOBLE SHORELINE**

RP1.....This 98-acre heavily wooded riparian area on Sharps Branch is excellent wildlife habitat and serves to filter stormwater runoff from adjacent residential areas. Ranking criteria 1, 2, 3, & 5. Future development should be limited to spur trails providing links to the main hiking/equestrian trail in Rocky Point Park.

RP2.....This 131-acre heavily wooded area is located totally within Rocky Point Park and makes up the majority of the higher elevations within the park. The woodlands are mature and very diverse, and are interspersed with small patches of native prairie. The entire area serves as an important visual buffer next to rapidly growing residential areas. Ranking criteria 1, 2, 3, & 4. Future development could include continued development of the existing trail system.

PN1.....This 79-acre shoreline tract, running from Rocky Point Park to the beginning of Twin Coves Park, is steep and rugged with only a thin strip of Federal land between the lake and adjacent residential development. This segment of shoreline is critically important as a buffer against shoreline erosion and a visual screen next to residential areas. The area may also serve as a corridor for wildlife traveling along the shoreline between larger tracts of Federal land. The Northshore Trail currently does not extend along this shoreline due to the narrow character of the Federal land in many locations. Perhaps with the use of trail easements across private land, the trail could be extended through the area. Ranking criteria 1, 2, 3, 4, & 5.

## **FIGURE 10. TWIN COVES PARK**

TC1 & 2.....These two areas, totaling 225 acres, are relatively long, narrow riparian corridors supporting mature stands of riparian and upland woodlands. These areas are excellent wildlife habitat and also serve to preserve open space and provide a visual buffer along the entrance road to Twin Coves Park and next to adjacent residential areas. Ranking criteria 1, 2, 3, 4, & 5. Future uses may include continued hiking and nature/interpretive trail development.

## **FIGURE 11. MURRELL PARK**

M1.....This 70-acre area is a relatively long, narrow riparian corridor serving the same functions and meeting the same ranking criteria as Twin Coves Park areas TC1 & 2.

M2.....This 11-acre area is a flat, open field centrally located within the western end of Murrell Park. This field exhibits exceptional wildflower blooms throughout spring and summer and should be managed to support continued blooms and general open space values. Ranking criteria 2 & 4.

M3 & M4.....These two areas, totaling 58 acres, are similar in that they support dense, mature stands of riparian and upland woodlands and each one is a boundary tract lying next to residential developments. Area M4 also has excellent native prairie habitat along both sides of the main circulatory road in Murrell Park. Ranking criteria 1, 2, 3, 4 & 5. Future use of these tracts should be limited to hike/bike trail development, which is complementary to the existing Northshore Trail.

M5.....This 67-acre area supports a relatively large, dense stand of mature upland hardwoods and runs adjacent to approximately 16,000 feet of Government boundary which borders existing or planned residential/commercial areas. Ranking criteria 1, 2, 3, 4 & 5. Future use of the area should include continued operation of the existing Northshore Trail and the possible addition of low-impact, primitive campsites accessible only by way of the Northshore Trail.

## CHAPTER 4 - LAND CLASSIFICATION UPDATES AND CHANGES

### 4-01. Scope of Update and Changes

As explained in Chapter 1, the Corps of Engineers is obligated, per the findings of the Environmental Assessment for the Opryland Hotel golf course and related facilities, to update the land classification of Wildlife and Esthetic Areas as set forth in the 1971 master plan. Additionally, the objectives of this master plan supplement include a requirement to examine the current intensive recreation land classification for Roanoke, North Shore, Knob Hills, and Rocky Point Parks. The resulting changes in land classification are described in the following paragraphs. All land classification changes and updates in this master plan supplement follow the classification system set forth in EP-1130-2-550, dated November 15, 1996.

### 4-02. Updates to Wildlife and Esthetic Areas

The 1971 Master Plan classified all lands west of Highway 377 as Wildlife Management Area. By virtue of this master plan supplement these lands are henceforth classified as Multiple Resource Management Area - Wildlife Management General.

The 1971 Master Plan also classified a large block of land between Highway 377 and Marshall Creek Park, and several smaller, scattered shoreline areas, as Esthetic Area. By virtue of this master plan supplement these lands are henceforth classified as Multiple Resource Management Areas - Recreation Low Density and Wildlife Management General.

The above changes are depicted on Figure 1. These changes are essentially a change in nomenclature to reflect current standards and will not have a direct bearing on, or cause a change in, the way these lands have been managed in the past. As Wildlife Management and Recreation Low Density areas, these areas are afforded a high degree of protection from potential disturbances such as easements or rights-of-way for utilities or roads. The natural character of these areas is to be protected although wildlife management activities such as prescribed burning, vegetative manipulation, or construction of wetlands, nesting structures or other wildlife-related facilities is appropriate. Public

use of these areas is generally limited to passive activities such as hiking, bird-watching, nature appreciation, hunting, and fishing.

#### 4-03. Updates to Recreation Areas

In discussing the current high density recreation classification of Roanoke, North Shore, Knob Hills, and Rocky Point Parks with representatives of the cities of Roanoke and Flower Mound, and with equestrian organizations currently using the areas, several changes were recommended and are hereby incorporated into this master plan supplement. These changes are substantial in that Roanoke Park is relocated and all four of these parks are reclassified from High Density Recreation to Multiple Resource Management Area - Recreation Low Density. The changes are described in the following paragraphs and are depicted on Figure 1.

a. The 21-acre Roanoke Park area has been relocated from the west side of Highway 377 to the east side of Highway 377 and is reclassified from High Density Recreation to Multiple Resource Management Area - Recreation Low Density. The 21-acre tract on the west side of Highway 377 is now classified as Multiple Resource Management Area - Wildlife Management General. The new location will better serve the general public as a possible future trailhead for the low-impact trails that may eventually traverse areas east and west of Highway 377.

b. North Shore, Knob Hills, and Rocky Point Parks are hereby changed from High Density Recreation to Multiple Resource Management Area - Recreation Low Density. This change reflects the current and historic recreational use of the areas and is complementary to the park and recreation management goals of the adjoining Town of Flower Mound.

## CHAPTER 5 - UTILITY CORRIDORS

### 5-01. Purpose of Corridors

As a result of the Environmental Assessments published for the Opryland Hotel Golf Course, entrance road, and related facilities, the U.S. Army Corps of Engineers agreed to designate utility corridors on Federal land at Grapevine Lake. The purpose of these corridors would be to serve as the Government's preferred routing for future utility line proposals. Concentrating future utility easements into these designated corridors would reduce environmental impacts by reducing fragmentation of wildlife habitat, reducing impacts on visual aesthetics, and in some cases reducing the direct loss of natural resources. Any loss of natural resources that could not be avoided within a designated corridor would be mitigated as specified by the Corps of Engineers. The designation of utility corridors will also facilitate the land use planning efforts of cities, utility interests, and real estate developers. The placement of any future utilities within an existing easement may require the consent of the owner of the existing easement. Use of corridors within areas leased by the Corps to others would also require consent of the lessee. The future use of any designated corridor will require review by the U.S. Fish & Wildlife Service to insure compliance with the Endangered Species Act. An archeological survey may also be required.

### 5-02. Corridor Descriptions

During the examination of project lands for Environmentally Sensitive Areas, potential utility corridors were also examined. This was accomplished by identifying existing utility and road easements on Federal land and by discussing known utility needs with the public works staff of each city bordering Federal land. During that process, nineteen corridors were identified. Eighteen of these corridors follow existing utility easement routes and/or road easements. The remaining corridor was designated based on known needs expressed by the various cities. The following paragraphs describe in general terms the type, location, and size of the designated corridors. Corridor locations are also noted on Figures 2 through 11.

Corridor No. 1.....This corridor follows an existing, overhead electrical transmission line which runs roughly parallel to the toe of Grapevine Lake Dam through land that is leased to

the City of Grapevine for the city's municipal golf course. Near the south end of the dam, the corridor crosses to the west side of Fairway Drive and continues south along an existing water line easement parallel to Fairway Drive to the intersect with Highway 26. Additional utilities could possibly be located within the existing easement or within 15 feet either side of the existing easement, but only if the integrity of the dam is not compromised.

Corridor No. 2.....This corridor follows two existing, overhead electrical transmission lines located in the southern portion of Silver Lake Park and along Highway 26 and the Corps property boundary south and east of the Project Office. One line runs roughly north-south along the Corps boundary, then runs roughly in an east-west direction parallel to Highway 26 and across Corps property on the east side of Ruth Wall Road. This line crosses over Ruth Wall Road and then intersects the second line which runs roughly in a north-south direction. Any future utilities in the north-south segment, west of Ruth Wall Road, would need to stay within the existing easement. Future utilities within the segment lying east of Ruth Wall Road could likely be authorized within 15 horizontal feet on either side of the existing easement.

Corridor No. 3.....This corridor follows the recently authorized entrance road to the Opryland Hotel and Golf Course. Future utilities proposed for this corridor could be located within 25 feet of the roadway on either side.

Corridor No. 4.....This corridor follows a water line easement which generally runs in a southeast-northwest direction across Farris and Morehead Branches. This corridor could accommodate additional utilities within 25 horizontal feet from the north boundary of the existing easement. During discussions with the City of Grapevine regarding this corridor, the City expressed a need to extend Dove Road in a southeasterly direction across Farris and Morehead Branches and has expressed a desire to align the proposed road extension along the route of this corridor to the maximum extent possible. The proposed road extension would require an approximate easement width varying from 100 to 150 feet and would require a separate environmental assessment and full public review.

Corridor No. 5.....This corridor runs parallel to Dove Road where the road crosses McPherson and Jones Branches. Any



future utilities in this corridor should be located within 25 horizontal feet on either side of the existing road easement.

Corridor No. 6.....This corridor runs parallel to the east entrance road of Meadowmere Park to a point where the road crosses the first east-west road in Meadowmere Park. The corridor then runs west along this east-west road to a point where it intersects with the west entrance road to Meadowmere Park. Utilities along this corridor should be located within 25 feet of the roadway. Future overhead utilities should be avoided in this corridor to reduce the impact on visual aesthetics in Meadowmere Park.

Corridor No. 7 A & B.....These two corridors are conceptually identified to meet a need expressed by the City of Southlake for future sewer lines and possible lift stations near the south terminus of Federal land located along two unnamed tributaries. The city's objective in placing the new sewage facilities would be to achieve gravity flow to strategically located lift stations where the sewage would then be pumped in a westerly direction with an ultimate destination being the Trinity River Authority sewage treatment plant. Precise corridor locations are yet to be determined, but would generally be east-west corridors crossing the two unnamed tributaries at approximate right angles using the minimum width necessary. In discussing these corridors, the city was advised that long runs of sewer line on Government land for the sake of reducing impact on private land is to be avoided to the maximum extent possible. The city was also advised that damage to high quality habitats during construction of underground utilities should be avoided by using subsurface boring in lieu of open cuts

Corridor No. 8.....This corridor runs parallel to White Chapel Road on both sides of the road. The corridor extends 25 horizontal feet from both the east and west limits of the existing road right-of-way. The city may someday seek to widen and elevate White Chapel Road at the crossing of Kirkwood Branch. As presently located, this critical north-south road becomes inundated during maximum flood events. Establishment of a utility corridor at this location does not convey approval of any expansion of the roadway. Should the City of Southlake request expansion of the roadway, an environmental assessment and public review period may be required depending on the degree of environmental impact.

Corridor No. 9.....This corridor runs east-west and parallel to an existing overhead electrical line along the south line of Government tract E-405. It then departs from the existing overhead electrical line and continues in a due east-west direction across Marshall Creek and across Government tract E-401-A. The extension of the corridor across Marshall Creek was done at the request of the Town of Trophy Club to accommodate the town's plans for future gravity-flow sewers and continuous-loop water lines across Marshall Creek. This corridor is confined to the width of the existing electric line easement, except where it crosses Marshall Creek on Tract E-401-A, where it has a width of 25 feet. Because this utility corridor crosses an Environmentally Sensitive Area where no easement currently exists (where it crosses Marshall Creek), any proponent of a utility line at this location will be required to relocate an existing electrical transmission line located a short distance to the north of this corridor. The relocation would place the existing line inside the utility corridor. The relocation of the existing electrical line will be considered a mitigative action to reduce disturbance to the Environmentally Sensitive Area. Furthermore, future utility construction in this corridor where it crosses the woodlands on either side of Marshall Creek should be installed by way of subsurface boring. During the review of this utility corridor, the U.S. Fish & Wildlife Service specifically requested that an Environmental Assessment, to include an alternative routes analysis, be prepared prior to approval of any easement within the corridor. On a related note, The Town of Trophy Club has conceptual plans for a roadway and bridge across Marshall Creek in the proximity of this utility corridor. However, designation of this utility corridor does not convey approval of the proposed roadway.

Corridor No. 10.....This corridor runs parallel to an existing overhead transmission line which runs roughly parallel to State Highway 377. This corridor extends 25 horizontal feet on the east side of the existing electric line easement and extends west to the east right-of-way line of the railroad track which runs parallel to State Highway 377.

Corridor No. 11.....This corridor runs parallel to the route of an underground natural gas pipeline located roughly on the west boundary of Government tract F-541. A small portion of this corridor crosses Graham Branch on Government tract F-539. This corridor extends 25 horizontal feet from the east boundary of the existing easement where it follows the

Government boundary line. At other locations the corridor extends 25 horizontal feet on both the east and west boundary of the existing easement. It is important to note that any utility crossing of Denton Creek within this corridor must be accomplished by subsurface boring. No open cuts or overhead utility lines will be allowed in this corridor where it crosses the bottomland hardwood forest of Denton Creek.

Corridor No. 12.....This corridor runs parallel to the west right-of-way line of Cleveland-Gibbs Road. The corridor extends 25 feet to the west of the road right-of-way.

Corridor No. 13.....This corridor runs parallel to an existing overhead electrical line located primarily on Tract F-501. The corridor extends 15 feet on the east side of the existing easement.

Corridor No. 14.....This corridor runs parallel to Interstate Highway 35 West. The corridor extends 15 horizontal feet from the east and west line of the existing highway easement.

Corridor No. 15 A & B.....These two corridors run parallel to Farm-to-Market Road FM 1171 (15 A) and the abandoned roadbed of the old FM 1171 (15 B). The corridors extend 25 horizontal feet from the south line of FM 1171 and 25 feet from the north edge of the abandoned roadbed of old FM 1171. The designation of this utility corridor does not convey approval for the proposed widening of FM 1171 where it crosses Federal land.

Corridor No. 16.....This corridor follows the route of an existing overhead utility line where it crosses Surveyors Branch. The width of this corridor is limited to the width of the existing electric line easement.

Corridor No. 17.....This corridor runs parallel to the north right-of-way line of Cardinal Lane where it crosses Government Tract D-306. The corridor extends 25 feet north from the north right-of-way line of Cardinal Lane.

Corridor No. 18.....This corridor runs parallel and 25 feet north of the north right-of-way line of Wichita Trail.

Corridor No. 19.....This corridor consists of an abandoned park roadbed which runs east-west through Murrell Park along the common boundary between Government tracts B-118 and B-125-A. The corridor extends 15 feet either side of the old roadbed.

## Appendix A - COLLABORATIVE PLANNING TEAM

### A-01. Collaborative Planning Team

The following planning team was established at an introductory meeting held on April 11, 2000. Subsequent meetings of the entire planning team were held at City Hall, Grapevine, Texas on June 3, 2000 and August 30, 2000. The Corps team members also met separately with each city to discuss anticipated park development plans and utility corridors needs which may affect Federal land. Copies of letters from these team members are included in this appendix.

DON WIESE.....	CORPS OF ENGINEERS (Team Leader)
RON PIVONKA.....	CORPS OF ENGINEERS
DALE KING.....	CORPS OF ENGINEERS
DR. HANK JARBOE.....	CORPS OF ENGINEERS
ANNIE HENRY.....	CORPS OF ENGINEERS
RICH ADAMSON.....	CORPS OF ENGINEERS
MIKE ARMSTRONG.....	U.S. FISH & WILDLIFE SERVICE
JENNIFER BARROW.....	TEXAS PARKS & WILDLIFE DEPARTMENT
JOHN DAVIS.....	TEXAS PARKS & WILDLIFE DEPARTMENT
BART STEPHENSON.....	TOWN OF FLOWER MOUND
STAN LASTER.....	CITY OF GRAPEVINE
JOE MOORE.....	CITY OF GRAPEVINE
BEN HENRY.....	CITY OF SOUTHLAKE
SHIRLEY ROGERS.....	TOWN OF NORTHLAKE
RONNIE ANGEL.....	CITY OF ROANOKE
LONNIE EGERTON.....	TOWN OF MARSHALL CREEK
PAUL ROSENBERGER.....	TOWN OF TROPHY CLUB
ALANA SOMMER.....	CROSS TIMBERS EQUESTRIAN TRAILS ASSOC.
JULIE LANDESBERG.....	CROSS TIMBERS EQUESTRIAN TRAILS ASSOC.
BUD MELTON.....	TEXAS TRAILS NETWORK
GILBERT WELCH.....	MARINAS INTERNATIONAL
KEN DICKSON.....	UNT INSTITUTE OF APPLIED SCIENCE
MARGARET FORBES.....	UNT INSTITUTE OF APPLIED SCIENCE
TERRY HODGIN.....	DALLAS WATER UTILITIES

#### Mapping and GIS Support:

Dennis Akins.....	Corps of Engineers
Lita Schutter.....	Corps of Engineers
Bryon Haney.....	Corps of Engineers

A-02 - LETTERS FROM TEAM MEMBERS

U.S. FISH & WILDLIFE SERVICE  
TEXAS PARKS & WILDLIFE DEPARTMENT  
TOWN OF FLOWER MOUND  
CITY OF GRAPEVINE  
CITY OF SOUTHLAKE  
TOWN OF NORTHLAKE  
CITY OF ROANOKE  
TOWN OF TROPHY CLUB  
CROSS TIMBERS EQUESTRIAN TRAILS ASSOC.

## APPENDIX B - ENVIRONMENTAL ASSESSMENT AND PUBLIC INVOLVEMENT

### B-01      Environmental Assessment Process

An Environmental Assessment (EA) of this master plan supplement will be prepared by the Corps of Engineers following final approval of the supplement by the planning team. The EA and the master plan supplement will be available for a 30-day public comment period. Hard copies of the EA and master plan supplement will be available for public review at the Corps Grapevine Lake Office and at city hall of the various cities represented on the team. Electronic versions will be posted on the Corps of Engineers web site at <http://www.swf.usace.army.mil>. Upon completion of the EA process, a copy of the EA will be appended to the master plan supplement.